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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,578	06/30/2000	Roger K. Kulle	12465US01	1790
7590 10/31/2003			EXAMINER	
Joseph M Barich McAndrews Held & Malloy Ltd 500 West Madison Street 34th Floor Chicago, IL 60661-2511			EASTHOM, KARL D	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/609,578	KULLE, ROGER K.	
	Examiner	Art Unit	
	Karl D Easthom	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-12 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 4 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-6, 13-15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sulich et al. Sulich discloses the claimed invention at Figs. 1-2 and 4 with Hall sensor 24 and magnets of opposite polarity 26, 27 or 36,37 with switch housing 12, and carriage 16, 17, 21. The magnets have a longitudinal axis perpendicular to the longitudinal axis of the carriage where such axis is along the radial direction of the magnets. In claim 2, 21 is a boot seal. In claim 3, magnets 17, 18 constitute a spring where they impart biasing force as noted at col. 3, lines 40-45. (Or see the alternative for spring and boot seal below). In claim 5, the polarities are opposite. In claim 6, see magnets 17, 18, or 19, 20 for example.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sulich in view of Garneyer et al. Sulich discloses the claimed invention except the boot seal and spring, where here the terms are less broadly construed. Garneyer et al. discloses boot seal 11 and return spring 4a for keeping unwanted fluids out of the housing at col. 3, lines 20-36, and for providing a biasing force for the carriage. In view of Garneyer, it would have been obvious to

use a seal and spring for the noted purpose in the device of Sulich since Sulich employs a biasing force and it is well known that springs provide a force, and it is well known that electronic and mechanical parts do not work when dirty or wet.

5. Claims 1-3, 5-6, 13-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garneyer et al. in view of Peterson. Garneyer discloses the claimed invention at Fig. 2 except the magnets of opposite polarity touching each other. Peterson at Fig. 8 discloses the magnets of opposite polarity touching with a motivational purpose of sending different signals to different Hall switch devices, or to simply increase the size of the magnets by doubling same with another one. It would have been obvious to employ the scheme where multiple Hall devices and magnets are disclosed and suggested at col. 4, lines 1-12 of Garneyer. The multiple magnets meet claims 12 and 17. The spring is 4a, with Hall switches and magnets 8a, 7a, actuating members 3 and housing 1. The seal is 11, 12. Peterson discloses that the magnets "can be enclosed by a ...plastic". This implies that they need not be enclosed, and "enclosed" also implies that no gap is necessary, because the "magnets" are "enclosed" which implies enclosed together, or suggests same, where the opposite poles would pull the magnets toward each other to contact same, and Peterson is concerned only with low friction between the magnets and the enclosure 94.

6. Claims 8-12 are allowable.

7. Claims 4 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Applicant's arguments filed 9/15/03 have been fully considered but they are moot or not persuasive. Applicant argues that the magnets of Sulich do not have a "longitudinal axis" that extends generally perpendicular to a longitudinal axis of the Hall switch. . Applicant's argument assumes the mistaken impression that "longitudinal" is construed as the dimension from up to down. This is not correct, it means "of or pertaining to length". Of course, there are three dimensions of length for three dimensional objects, and this applies to the magnets. Nor does applicant use the term in the specification, although that would not necessarily impart a limitation. Applicant argues that the switch is a conventional that actuates when the switch detects a predetermined magnetic level, and then argues it does not actuate when the key actuates. If this were so, then the key would be useless, as it would do nothing when actuated. Since applicant's Hall sensor appears conventional also, and switches just like that of any other, what is argued is not clear, nor understood. For claim 2, applicant states the cup 21 is not a boot seal, the examiner repeats that it is, and there is no reason given why it is not. For the spring bias, the magnet 18 is a return spring that has a biasing force as noted above. Applicant argues that Peterson discloses a gap separating the magnets 132 and 133. However, as pointed out by applicant, if there is a gap, it is due to a plastic that "can" surround the magnets, col. 7, lines 30-40. This means that the disclosure contemplates that a gap need not be filled by the material. Applicant argues that absent the material there would still be a gap, but this is not correct for the magnets would touch by attractive force. Peterson discloses that the magnets "can be enclosed by a ...plastic". This implies that they need not be enclosed, and moreover "enclosed" also implies that no gap is necessary, because the "magnets" are "enclosed" which implies enclosed together. That is, Peterson suggests or discloses no gap because two magnets enclosed means

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one enclosure around the two, where the opposite poles would pull the magnets toward each other to contact each other, and Peterson is concerned only with low friction between the magnets and the enclosure 94. What is in other embodiments does not detract from this teaching. The motivation for the combination of Garneyer and Peterson is noted and would meet the claim for reasons noted. The argument about Garneyer is not clear as noted previously, since Peterson supplies the contacting magnets.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703)308-3306. The examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


KARL D. EASTHOM
PRIMARY EXAMINER